

CLAIMS

1. A method for stirring a liquid sample containing an analyte and a reagent, said method comprising the steps of:
 - (A) providing a cell comprising: a liquid sample retaining section having a plurality of particles and said reagent, and a liquid sample supply inlet, and supplying a liquid sample containing an analyte from said liquid sample supply inlet to said liquid sample retaining section; and
 - (B) stirring said liquid sample and said reagent by the movement of said particles caused by the flow of said liquid sample in said liquid sample retaining section resulting from the supply of said liquid sample, to obtain a liquid mixture containing said liquid sample, said reagent and said particles.
2. The stirring method in accordance with claim 1, wherein said reagent includes a specific binding substance capable of specifically binding with an analyte in said liquid sample.
3. The stirring method in accordance with claim 2, wherein the electric charge of at least the surface of said particles and the electric charge of said specific binding substance have the same polarity in said liquid mixture.
4. The stirring method in accordance with claim 1, wherein the flow of said liquid sample in said step (B) is a flow circulating along the inner face of the wall of said liquid sample retaining section.

5. A cell comprising: a liquid sample retaining section having a plurality of particles and a reagent; and a liquid sample supply inlet,

wherein said particles are retained in said liquid sample retaining section in such a manner as to be movable by the flow of a liquid sample supplied from said liquid sample supply inlet into said liquid sample retaining section, and

said liquid sample and said reagent are stirred by the movement of said particles.

6. The cell in accordance with claim 5, wherein said reagent includes a specific binding substance capable of specifically binding with an analyte in said liquid sample.

7. The cell in accordance with claim 6, wherein said particles and said specific binding substance are adjusted such that the electric charge of at least the surface of said particles and the electric charge of said specific binding substance have the same polarity in said liquid mixture including said liquid sample, said reagent and said particles obtained by the supply of said liquid sample.

8. The cell in accordance with claim 7, wherein said liquid sample retaining section has a buffer, and said buffer adjusts the pH of said liquid mixture such that the electric charge of at least the surface of said particles and the electric charge of said specific binding substance have the same polarity in said liquid mixture.

9. The cell in accordance with claim 5, wherein said

particles are coated with said reagent such that said reagent dissolves in said liquid sample.

10. The cell in accordance with claim 6, wherein said particles carry a substance that inhibits said specific binding substance from adsorbing to said particles.

11. The cell in accordance with claim 6, wherein said particles carry a substance adsorbing a substance that inhibits reaction between said analyte and said specific binding substance.

12. The cell in accordance with claim 5, wherein the diameter of an outer opening of said liquid sample supply inlet is greater than the diameter of an inner opening of said liquid sample supply inlet.

13. The cell in accordance with claim 5, further comprising a light entrance for allowing light to enter said liquid sample retaining section, and a light exit for allowing the light to exit from said liquid sample retaining section.

14. A measuring apparatus comprising:
a cell holder that holds the cell of claim 13;
a liquid sample supply unit for supplying said liquid sample to said liquid sample retaining section through said liquid sample supply inlet of said cell;
a light source for emitting light to said light entrance of said cell; and
a light detector for detecting the light that has exited from said light exit of said cell,

wherein said measuring apparatus measures an analyte in the liquid sample based on the light detected by said light detector.

15. A measuring method by using a cell including a light entrance for allowing light to enter said liquid sample retaining section, and a light exit for allowing the light to exit from the said liquid sample retaining section,

said method comprising, in addition to the stirring method of claim 2, the steps of:

(C) allowing a light enter into said liquid sample retaining section through said light entrance;

(D) detecting the light exited to outside of said liquid sample retaining section through said light exit; and

(E) measuring an analyte in said liquid sample based on the light detected after said particles in said liquid mixture settle down.